Computer Programming C / C + +

WHAT IS C / C + + ?

1. What is C?
2. Advantages of C language.
3. C' s Weaknesses
4. History of C.
5. Difference between C & C ++

BASIC LELMENTS OF C/C ++ PROGRAM

1. C/C ++ Character Set.
2. C/C ++ Reserved Words.
3. User- defined Words.
4. Variables
    a) Naming Variables
    b) Variable Types
5. Constants.
    a) Numeric Constants
        i. Integer Constants
        ii. Floating Point Constants.
        iii. Exponential Real Constants.
    b) Non-Numeric Constants.
        i. Character Constants
        ii. String Constants
6. C/C + + Operators.
7. C/C + + Expressions
8. C/C + + Statements.

STRUCTURE OF C/C + + PROGRAM

1. Structure of C/C ++ program
2. C/C ++ comments.
3. C/C++ libraries
4. C/C ++ Data types.
5. The size of operator

6. Declaring Variables & Constants.
7. Assignment & Multiple Assignment operator.
8. How to assign String data?
9. Priority of Operations
10. Types Casting Operator.
11. Increment (++) & Decrement (--) operators.
12. Compound assignment operators

OUTPUT STATEMENS.

1. The **printf** ( ) function.
2. The **clrser** ( ) function.
3. The **cout,** output stream.
4. The **putch** ( ) & **putchar** ( ) Character output Function.
5. The **puts** ( ) String output Function.

INPUT STATEMENTS.

1. The **scanf** ( ) function
2. The **gets** ( ) function.
3. The **getchar ( ), getch ( ) , and getch** ( ) functions.
4. Input using **cin**

MAKING DECISIONS.

1. Transfer of Control Process.
2. The **if, if-** else and **nested if** statements.
3. Relational operators.
4. Conditional Operators.
5. Multiple Choice statements (**switch / case / break / default**).

LOOPING

1. Counters.
    a. Standard Counter.
    b. Accumulator Counter.

c. Multiplicative Counter.

2. Looping in C/C ++
3. The **for** & **nested-** for statement
4. The **while** loop.
5. The do **while** loop.
6. The break, continue and exit ( ) statements.
7. Preprocessor Directive.

STANDARD LIBRARY FUNCTION

1. Trigonometric Functions

   Sin ( ) **, cos** ( ) **, tan ( ) etc**.

2. Arithmetic Functions.

   Abs ( ), sqrt ( ), log ( ), exp ( ), ceill ( ) . floor ( ) pow ( ) pow 10 ( ), random( ) , rand ( ), etc.

3. String Functions.

Strlen ( ) strlwr ( ), strupr ( ) ,strrev ( ), strncpy ( ), strecat ( ), strncat ( ),